

# NEXT GENERATION IDENTIFICATION

# BETTER

The Federal Bureau of Investigation's (FBI's) Criminal Justice

The Feder Info Information Services (CJIS) Division operates and maintains the Integrated Automated Fingerprint Identification Sys-

tem (IAFIS), which became the world's largest person-

centric biometric database when it was implemented in July 1999. Since then, advancements in technology and the changing business needs of IAFIS's customers have necessitated the next generation of identification services. To further advance biometric identification services, the CJIS Division, with guidance from the user community, has estab-

lished the vision for the Next Generation Identification (NGI).

WEST GENERATION IDENTIFICATION The NGI system will be developed over multiple years, and it will be an incremental replacement of the IAFIS that provides new functionality and improves existing capabilities. This technological upgrade will accommodate increased information processing and sharing demands from local, state, tribal, federal, and international agencies. The NGI system will offer state-of-the-art biometric identification services and compile core capabilities that will serve as the platform for multimodal functionality.

#### U.S. Department of Justice

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NGI Website: www.fbi.gov/hq/cjisd/ngi.htm

# **Advanced Fingerprint Identification Technology (AFIT)**

The AFIT objectives will enhance current fingerprint and latent processing services, increase the accuracy and daily fingerprint processing capacity, and improve system availability. New functionality will include a rapid fingerprint search of the Repository for Individuals of Special Concern. This new capability will provide a rapid identification search of a limited population using two to ten rolled or flat fingerprint images. The limited population is anticipated to contain records for wanted persons, Known or appropriately Suspected Terrorists, National Sex Offender Registry subjects, and other persons of special interest.

## Rap Back Service

The Rap Back Service will provide authorized users the capability to receive notification of criminal and, in limited cases, civil activity of enrolled individuals that occurs after the initial processing and retention of criminal or civil fingerprint transactions. This feature will provide a more timely process of confirming suitability of those individuals placed in positions of trust and notifying users of criminal activity for those individuals placed on probation or parole.

### **National Palm Print System (NPPS)**

The NPPS will create a centralized repository for palm print data within the NGI by facilitating the search and storage of both known and unknown palm prints. The NPPS will be accessible by authorized criminal and noncriminal justice agencies nationwide. This new capability will enable users to search latent palm prints obtained from crime scenes against a national repository, enhancing law enforcement's ability to solve crime.

#### **Enhanced IAFIS Repository (EIR)**

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including the iris, and provide administrative functions for special population files.

#### Iris Recognition (IR)

As the iris of the eye gains momentum as a strong biometric modality, IR is poised to offer law enforcement a new tool to quickly determine identity. The NGI iris pilot will follow the recommendations of the NGI stakeholders and evaluate the technology in an operational setting.

**Interstate Photo System (IPS)** 

## **Disposition Reporting Improvements (DRI)**

The NGI DRI capability will enable more efficient updates and provide a more complete criminal history repository. These methods have included modernizing the Machine Readable Data process to allow the submission of dispositions via Compact Disc Read-Only Memory. A new Interstate Identification Index (III) Disposition Message Key has been developed, providing the capability to update an FBI Identification Record with disposition data via the III. Future disposition submission capabilities include submitting disposition data via the CJIS Wide Area Network.

The NGI IPS Facial Recognition Pilot (FRP) Project is a collaborative effort between the FBI and pilot agencies to identify user needs and develop a useful investigative tool for the law enforcement community. The FRP will provide a search of a limited population of criminal mug shots using a submitted probe image. The candidates resulting from the facial recognition search will be processed automatically (lights out) and the system will return the results in a ranked candidate list.



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